



TECHNICAL UNDERSTANDING OF THE PROJECT, APPROACH AND INNOVATIVENESS IN DESIGN

INTRODUCTION TO THE CDG TEAM

Construction Dynamics Group, Inc. (CDG), in association with The Lukmire Partnership, Inc. and North Point Builders, Inc., is pleased to submit this Expression of Interest/Application for the Professional Services – Team Approach Project Management, Design & Construction Management of the North Laurel Park Community Center. Each of our Team's member firms has significant experience in the design and construction of community centers and senior centers as well as experience working in Howard County. CDG has worked with these team members successfully on previous projects.

Construction Dynamics Group, Inc. will fulfill the role as Project Manager for the Team. As such, CDG will oversee the work of the design and construction management functions of our Team members and be Howard County's single point of contact for the delivery and execution of the Team's services.

Construction Dynamics Group, Inc. (CDG) is a 90-person Howard County-based program management firm which specializes in the delivery of public facility projects. Our diverse staff is composed of project managers, inspectors, engineers, architects, CPM schedulers, cost estimators, commissioning agents and certified value specialists. CDG has area and regional offices in Maryland, Virginia, DC, Pennsylvania, Georgia, North Carolina, and Florida. More than 95% of CDG's work is in our core business of construction program management for public owners. CDG has been recognized nationally and internationally for excellence in construction program management. We have received four awards from the Construction Management Association of America (CMAA), including recognition for our work on the \$11 million expansion of the Harford County Detention Center and the \$32 million Henrico County Water Reclamation Facility. In 2004, we were ranked #49 on *Engineering News Record's* List of the Top 100 Construction Management-for-Fee Firms.

CDG has a wealth of Howard County experience. We are currently serving as Project Manager under the team approach project delivery method for the \$10.2 million Glenwood Community Center project where The Lukmire Partnership is the architect and North Point Builders, Inc. is the construction manager. CDG was Howard County's construction manager for the \$5.3 million East Columbia Library. Other current relevant experience includes our work as construction manager on the \$6.5 million West County Regional Library for Anne Arundel County, MD, designed by The Lukmire Partnership, Inc. CDG is also providing construction management services on the \$9 million Bethlehem, PA Township Recreation Center, a project very similar in scope and size to the North Laurel Park Community Center. Our local presence and past experience on Howard County projects makes us completely familiar with this building type and the County's standards, policies, and procedures.

The Lukmire Partnership, Inc. (TLP) is an accomplished architectural firm with extensive experience in the design of public and community center projects. TLP is currently working alongside CDG on the Glenwood Community Center project, and the Westover Library/Reed School for Arlington County, VA. TLP and CDG recently completed the West County Regional Library for Anne Arundel County, MD. All three buildings will be "green" buildings, certified under the U. S. Green Building Council's Leadership in Energy and Environmental Design (LEED™) program. TLP's proposed design team has expertise on similar projects, including a 95,000 square foot Community Center in Germantown, MD, a \$5.2 million Senior Center in Spotsylvania, VA, a \$7 million Child Development Center at Ft. Myer, VA, and a \$5.2 million Community Center for Northern Virginia Community College in Annandale, VA. As shown in the organization chart at the end of this section, TLP's primary sub-consultants will be **Mahan Rykiel Associates** (MRA), Baltimore, MD for land planning and



landscape architecture, **Patton Harris Rust & Associates** (PHRA), Columbia, MD for Civil/Site Engineering, **Schlenger/Pitz Associates** (S/P), Timonium, MD for Mechanical/Electrical/Plumbing Engineering, and **Columbia Engineering, Inc.** (CEI), Columbia, MD for Structural Engineering.

North Point Builders, Inc. (NPB) is a general contracting/construction management firm with vast experience building community center projects, including the Aberdeen Senior Center, Edgemere Senior Center, Boys and Girls Club of Edgewood, MD, Anita Leight Estuary Center, and a number of Police Athletic League Recreation Centers. NPB is currently working as construction manager on the \$10.2 million Glenwood Community Center, where CDG is serving as the County's project manager. North Point Builders bring to the CDG Team extensive practical knowledge of construction and cost issues regarding this building type, knowledge of and familiarity with the local trade contractor marketplace, and recent experience working under Howard County's standards, policies and procedures.

TECHNICAL UNDERSTANDING

The CDG Team has reviewed the project description provided in the solicitation package and other supporting documents provided at the Pre-Application Meeting. We visited the site and understand that, although the details of the current site plan may change, there are challenges with the site and integration of the facility's functions that must be addressed.

Specific Challenges to Be Addressed

The North Laurel Community Center project presents an opportunity to, not only provide a much needed community resource, but to plan an environmentally sensitive 45 acre parcel. The opportunity to conceptualize the entire park and then to design its' first component, the community center, will have significant impact on the neighborhood. To a large extent, the approach to the park design will make this project noteworthy and a model of sustainable land planning and responsible development in a suburban setting. We see this as both a challenge and an opportunity. Our approach is one that will set this design team apart.

In addition, there is an opportunity to work with the County and neighborhood groups to develop a building program that responds to the needs of this specific community. The resulting park Master Plan and community center design must have as goals:

- Broad acceptance and support by the community
- Model of sustainable design
- Environmentally sensitive planning
- Ease of access and use
- Safety and Security
- Memorable architecture

Site Development:

The 45-acre site is a heavily wooded, sloped site with access from two main streets. It wraps around the Laurel Wood Elementary School site and has the potential to include the school site into the overall plan. A focus of the park design approach will be:

- Identify location of access points, both vehicular and pedestrian
- Siting of the various facilities to develop a cohesive identity for the park
- Integration of the park activities into the neighborhood fabric
- Location and amount of parking





- Retention of the natural character of the land

It is expected that all utilities can be extended from the adjacent streets so other than the cost of extension; utilities are not expected to be a primary issue.

There is a great opportunity for the proposed built facilities; community center, library, swim center, to work together to create a sense of place and identity to the park. While these facilities will be in the park, they may front on the neighborhood streets and/or face each other to create a “mini-complex” within the park. Gathering facilities may have the added benefit of sharing parking facilities so that minimum, yet adequate, parking is provided and more land left as open space.

It is our hope that the facilities are seen as “buildings-in-a-park” as opposed to buildings separated by landscaping. This is an important distinction – by retaining natural topography, and siting facilities to work with the landscape, the resultant image will be a “park,” rather than a string of facilities lining a road. This is the right thing to do from an environmental standpoint and the right thing to do for a community needing open space and a relief from high density development.

Building Program

The proposed program will address both passive and active recreational needs for residents of all ages. While it is expected that neighborhood groups will have input into programmatic needs that are tailored to their community, it is also expected that Howard County will want to develop community centers that provide similar functions throughout the County. As such, it is expected that facilities will be provided for ages from seniors through preschool age children requiring day care. The community center will need to contain spaces including passive environments, activity centers and athletic environments.

All three of these functions are compatible, although each has its’ own basic character, acoustical requirements, energy levels and physical requirements. The users of the senior center may want to interact only with other seniors and have no interest in other uses. Others may be looking for opportunities for exercise and interact with children (intergenerational activities). The center must accommodate both by creating a defined place for seniors while making it easy, through building circulation, to take advantage of other facilities. The seniors’ environment will need to be brighter, acoustically quiet, without barriers, easy to access from parking or drop-off zones and, perhaps, have a more traditional aesthetic than the children’s area. The physical activity areas are a good transition between young and old. These areas will have the liveliest environment. This issue of creating separate, but integrated environments will be the biggest challenge with the design.

APPROACH

Appendix B of the solicitation contains a comprehensive itemized listing of the specific responsibilities and tasks to be performed by each of the elements (project management, design, and construction management) of the CDG Team, so they will not be repeated here. CDG will manage the accomplishment of each of these individual tasks in order to accomplish the following goals:

- **Design and construct a site plan and facility which satisfies program requirements** – The CDG Team, by closely monitoring the progress of design, will ensure the constructed facility meets the needs of Howard County.
- **Design and construct a project which addresses the needs and concerns of all project stakeholders** – The CDG Team recognizes that there are many groups that will be part of the design, construction and operation process. CDG will conduct coordination meetings between the “operating” and “coordinating”





management teams to ensure the various facility stakeholders have input into the process, consistent with oversight and guidance from Howard County's Project Manager.

- **Complete the project on-time and within budget** – The CDG Team will use our scheduling and cost estimating expertise, coupled with our know-how of design, bid/award and construction processes to control the time available to construct a facility that meets the needs of the program in the most economical fashion possible. CDG will develop a “cost model” with target construction costs for each building system that will guide the design of this facility. The CDG team has green building (LEED) experience, and can also provide Commissioning to ensure the building systems operate properly upon occupancy.
- **Keep Howard County in control of the process** – The CDG Team recognizes that Howard County is delegating a significant amount of responsibility to us to coordinate and manage the Team's resources. CDG will serve as the County's single point-of-contact to deliver the project. We commit to make the best use of our team member's individual talents to develop synergy and produce the best results possible from a collaborative group of managers, designers, and builders. The CDG Team will foster an open two-way communication process with the County to keep the County continually informed concerning project progress and issues.

INNOVATIVENESS IN DESIGN

The CDG team has a **proven record of innovation** in community center design. For example, the Glenwood Community Center has a number of design innovations. As the County's first “green” environmentally friendly building, we proposed a “geothermal exchange” heating and cooling system. This solution replaces conventional boilers and chillers with a system that uses the earth's natural temperature providing an energy efficient, low maintenance facility. With today's rising fuel costs, this innovation will pay back in a short period of time. The CDG team also proposed an internal courtyard, which secures outdoor space for special activities and provides better daylighting for internal spaces. In order to reduce construction costs, the CDG team reduce the building's steel by designing a masonry bearing wall system. The CDG Team will employ our innovative, proven process to develop and capture Howard County's wants and needs for the North Laurel Park Community Center.

The initial four steps in the Design Process are the critical ones. They enable you, the client, to communicate programmatic goals, technical requirements, aesthetic designs, process issues, budgets and schedules to the entire design team and enables the design team to understand enough about you, so that we become advocates for your goals.

A hallmark of our approach is a **Kick-Off Meeting** where all stakeholders in the project and the entire design team gather as a group to meet each other, discuss the design process and review all of the issues previously identified. Subsequently we plan to meet with individual stakeholders to review their needs for specific functions. This process of **Information Gathering, Interviewing** and **Program Verification** or development will enable the design team to have a base line from which to begin developing design solutions. We will document this in a “**Program of Requirements**” report which includes a list of all spaces, their size, use, equipment and finishes.

Of equal importance is the **Analysis of the Site & Development of the Park Master Plan**. Issues of access, circulation, topography, utilities, soils, environmental factors, zoning, etc. will be identified with the goal of identifying the potentials and constraints of the site. Of prime importance will be an understanding of the requirements for park master plan.

The **Park Master Plan** will be derived from an evaluation of:

- Adjacent neighborhood context and impact





- Natural topography
- Current vegetation
- Site design
- Potential development areas or built facilities, open playfields, tennis courts, etc.
- Environmental regulations

Options will be developed illustrating site circulation, location of facilities and parking, open space and phasing.

Since you, our client, are the ones who can make value judgments regarding a design, we encourage the **Development of Design Options**. There is always more than one way “skin a cat” and we believe it is our responsibility to identify options for you and, through a series of working sessions, discuss advantages and disadvantages of each. Throughout the design process we expect and encourage communication with the **COMMUNITY**. Their support is critical to having a smooth approval process. Neighborhood meetings, newsletters and Web site communication have been techniques that have worked well in the past.

Once a Schematic Design is approved, the remainder of the design process is geared to implementing the design. Goals include a design that is:

Functional/Flexible
Economical
Easy to Operate
Easy to Maintain
Safe & Secure
Attractive
Environmentally Comfortable; based on Sustainable Design Concepts

Our goal is to make the design process enjoyable, predictable, educational and timely!

KEY STAFF

The key staff proposed by the CDG Team has been selected based upon their specific areas of expertise in the design and construction of community center buildings, as well as their experience in working for Howard County and other similar jurisdictions.

Project Manager – **Warren L. Walker, AIA, LEED AP** – Warren, a Howard County resident, has over 30 years experience as an owner’s representative managing the design, bid/award, and construction phases of public projects. Warren is currently serving as CDG’s Project Manager under the team approach project delivery method for the Glenwood Community Center, with The Lukmire Partnership as architect and North Point Builders as the construction manager. He was also CDG’s Project Manager for Anne Arundel County’s West Area County Library, where The Lukmire Partnership was the architect. Warren is a LEED™ Accredited Professional, certified by the U.S. Green Building Council for energy and environmentally responsible design and construction. Warren’s strong working relationships with the other key members of the CDG Team will be a benefit to Howard County. **Glenn Ryan, AIA** will be the Assistant Project Manager. Glenn worked on the Glenwood Community Center, and is a resident of North Laurel with a family that looks forward to using this new facility!





Architect – Gregory S. Lukmire, AIA – Greg has over 24 years experience and serves as The Lukmire Partnership’s design architect for all of the firm’s assignments. He has led the planning and design for a variety of community center projects, including the Glenwood Community Center, a 95,000 square foot Community Center in Germantown, MD, a \$5.2 million Senior Center in Spotsylvania, VA, a \$7 million Child Development Center at Ft. Myer, VA, and a \$5.2 million Community Center for Northern Virginia Community College in Annandale, VA. Greg is widely recognized for his ability to initiate and lead a consensus-building programming and design process.

Construction Manager – Kenneth Wingate, PE – Ken, also a Howard County resident, has more than 30 years experience as a general contractor and construction manager. He is serving in this same role on the Glenwood Community Center project. Ken’s construction management experience with projects similar to the North Laurel Park Community Center include Aberdeen Senior Center, Edgemere Senior Center, Boys and Girls Club of Edgewood, MD, Anita Leight Estuary Center, and a number of Police Athletic League Recreation Centers. The following organization chart shows how the CDG Team will staff this assignment.

